



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/715,002	11/17/2003	Darin Evans	SHA01 P-346A	2260
277	7590	04/28/2004	EXAMINER	
PRICE HENEVELD COOPER DEWITT & LITTON, LLP 695 KENMOOR, S.E. P O BOX 2567 GRAND RAPIDS, MI 49501			PEDDER, DENNIS H	
			ART UNIT	PAPER NUMBER
			3612	

DATE MAILED: 04/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/715,002	EVANS, DARIN
	<b>Examiner</b>	<b>Art Unit</b>
	Dennis H. Pedder	3612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 12 December 2003.  
 2a) This action is **FINAL**.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-21 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-21 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 17 November 2003 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date 11/17/03.
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_.  
 5) Notice of Informal Patent Application (PTO-152)  
 6) Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

“Adapted for attachment” is an indefinite recitation of implied, but not claimed, structure.

Suggest --for attachment-- as a clear recitation of function.

Recitation of “collapsible with a parallelogram motion” is indefinite. Recitation of “catches” an object is an indefinite recitation of function that lacks any structure for the function, as there is nothing to catch an object, and further depends on the shape and size of the object, not defined. “Such as the knee of a human being” is further indefinite as knees are located at various heights and it is not clear if a knee would impact between the nose portions.

Claim 7 is incorrect as there is no parallelogram motion disclosed. The nose portions deflect upwardly and downwardly at their left edges respectively when an object of the matching size impacts the space inbetween and the right edge, fastened to the beam, does not move, precluding the recited motion.

Claim 9 lacks antecedent to “top and bottom front walls” for --upper- front and lower-front walls--.

Claim 14 lacks antecedent to the “mid-horizontal section” found in claim 1.

Claim 15 lacks antecedent to “nose sections” for --nose portions--.

Claim 15 is also not disclosed as there is no throwing force, merely a force resolution 31, 31' as disclosed for figure 4. Further, inasmuch as the force 31' is restricted from moving the person downward because of the ground beneath, and due to the majority of the weight of the person being above the knee, the impact would direct the person into the automobile, not upwardly.

Claim 16 lacks antecedent for top and bottom walls as in --upper and lower walls--. The meaning of “non-uniform” is not clear from the disclosure. No upward plural forces are apparently disclosed as the disclosure has for 31.

Claim 21 lacks a clear frame of reference for “longer than the front wall”. How are the former and latter measured?

#### *Drawings*

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the 3 to 1 ratio of claim 11, and the fascia cooperating with the nose portions to help.., claim 20 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

*Specification*

4. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: claim 20 in total.

*Claim Rejections - 35 USC § 102*

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 5-8, 15-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Scrivo.  
Scrivo has top and bottom sections 34 with top, upper mid-wall, upper front wall, bottom wall, lower-mid wall, and lower front wall with nose portions that extend forward of the middle section at 32 with a mid-front wall connecting the upper-mid wall and lower-mid wall as seen in figure 2 and a middle section at the space therebetween. The top and bottom sections extend forward of the mid-front wall and define a channel at the space therebetween. Impact with an object of the shape of a knee would inherently shift the nose portions upwardly and downwardly as claimed. In addition, a second level of absorption is offered by the sections backing up the nose portions at 32 and in front of the beam, being crushed to provide increased energy absorption.

As to claim 16, the nose portions of Scrivo have upper and lower walls, a front wall and an angled front between front and lower wall. The front and angled walls with space between upper and lower noses are non-uniform as best understood.

As to claim 16, see the figures.

As to claim 19, see stabilizing wall at 32 in fig. 2 and in the walls of the channel for rivet 52 in figure 4.

As to claim 20, see fascia 42. The fascia would tend to cause the claimed motion for a knee that is of lesser vertical height than the space between the nose portions.

As to claim 21, for knees of lesser vertical height than the absorber, the function is inherent in a resilient absorber as disclosed by Scrivo.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 9, 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scrivo in view of Sturrus et al., US 5,092,512.

Paragraph 6 above is incorporated by reference. It would have been obvious to one of ordinary skill to provide in Scrivo a bumper beam with an aerodynamic sweep as taught by Sturrus et al. in order to reduce wind resistance and increase fuel economy.

As to claim 11, the beam is approximately this ratio, the exact ratio being an obvious expedient balancing weight against protection.

As to claim 12, process steps are not given patentable weight in a product claim, but Sturrus et al. incidentally discloses roll forming.

As to claim 13, see recesses and ridges in figure 2 of Scrivo.

As to claim 14, Scrivo has a ridge at top, bottom and mid sections.

9. Claim 4 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Scrivo.

Process steps are not given patentable weight in a product claim.

10. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Scrivo.

The size of the beam is an obvious expedient to one of ordinary skill in the art, hardly a patentable distinction.

11. Claims 2, 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scrivo or Scrivo in view of Sturrus et al. as applied to claims 1 and 9 above, and further in view of Hamaya.

It would have been obvious to one of ordinary skill to provide in the references above a wavy top and bottom walls as taught by Hamaya in order to add additional protection for pedestrians upon impact to those locations.

*Conclusion*

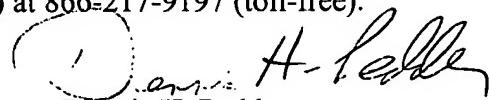
12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Mahfet et al., Weissenborn, Glance, Evans and Ikumoto show further channeled energy absorbers.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis H. Pedder whose telephone number is (703) 308-2178. The examiner can normally be reached on 5:30-2:00.

Art Unit: 3612

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn D. Dayoan can be reached on (703) 308-3102. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Dennis H. Pedder  
Primary Examiner  
Art Unit 3612

DHP